Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket No. 94-102
To Ensure Compatibility with	)	RM-8143
Enhanced 911 Emergency Calling Systems	)	

REPLY COMMENTS OF OMNIPOINT COMMUNICATIONS, INC.

Omnipoint Communications, Inc. ("Omnipoint"), by its attorneys, hereby replies to the comments filed in response to the Commission's Further Notice of Proposed Rulemaking ("FNPRM") in the above-captioned proceeding.[1] The comments filed bear out Omnipoint's underlying positions that (a) the proposed ALI requirement is not feasible at this time, and (b) the Commission should not mandate interoperability among wireless operators, both cellular and PCS, that use technically incompatible technologies. In addition, Omnipoint believes that the issue of routing non-code 911 calls to the PSAP must be resolved comprehensively by the Commission in this proceeding; Omnipoint is committed to routing all 911 calls to the PSAP unless it has liability immunity when it blocks 911 calls.

DISCUSSION

It is beyond dispute that better 911 systems are a public good, and this proceeding and the comments filed in no way dispute that truth. Rather, the issues to be decided in this proceeding are how to implement 911 in a manner that is technically feasible, economically sound, and that protects the public safety. The Commission should

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1 In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Report and Order and Further Notice of Proposed Rulemaking, CC Dkt. No. 94-102, RM-8143, FCC 96-264, ¶¶ 133-153 (rel. July 26, 1996) ("FNPRM").

consider carefully the comments presented by service providers and manufacturers that certain proposed rules are cost prohibitive and not technically feasible. Omnipoint respectfully submits that actual and significant improvement to wireless 911 systems can only be achieved with careful consideration of technical and economic feasibility.

I. Commenters Overwhelmingly Objected to the 40-Foot/ 90% Accuracy/Three-Dimension Location Proposal

As Omnipoint discussed in its initial comments, it is unaware of any practical way to meet the Commission's proposed 13 meters (40 feet)/90% accuracy/three-dimensional location requirement, given current PCS or cellular system technology and with the cost, size and weight constraints imposed on handset manufacturers by their customers. Adoption of such ALI requirements would impose completely unworkable and technically infeasible regulatory burdens on CMRS operators.

Leading equipment manufacturers agree. See *Comments of Harris Corporation* at 4 ("the proposed standard of 90 percent accuracy, within a radius of 40 feet is unrealistic and impractical given the state of the current ALI technology and will remain so for the foreseeable future"); *Comments of Raytheon E-Systems* at 1 (improvements in location technology are unlikely in the near future and "the mere suggestion of increasing accuracy requirements will likely have the effect of delaying investment in location technology therefore significantly reducing the opportunities for advancing the state-of-the-art."); *Comments of Lucent Technologies* at 3 ("Lucent is aware of no proven technology to meet [the proposed] accuracy and reliability, even with modification to mobile terminals."); *Comments of Ericsson* at 4 ("Ericsson is unaware of any technology available today at reasonable cost and size for the wireless market that will render position fixes accurate to 40 feet in a three dimensional environment 90% of the time."); *Comments of E.F. Johnson* at 3-4 (proposed rule is technologically infeasible); *Comments of TIA* at 5 (proposed rule "cannot be achieved with terrestrial systems"); *Comments of*

Nokia at 3 ("proposed ALI requirements are currently unrealistic"). Given the manufacturers' financial interest in selling equipment that meets new regulatory requirements, it is telling that not a single manufacturer supported the Commission's proposed rule.

In fact, while the Commission relied on KSI's assertions to propose the rule, FNPRM at ¶ 139, even KSI opposed the Commission's proposal. According to KSI, it does not believe that "its system, or any other system, can economically provide locational accuracy to within a radius of 40 feet, 90 percent of the time, in all environments." *Comments of KSI, Inc.* at 5. In sum, there is simply no technical support for the Commission's proposal. In fact, as Omnipoint demonstrated in its September 3, 1996 Petition for Reconsideration and Clarification, the current 125 meter location rule is itself infeasible, and so additional accuracy requirements are simply not realistic.

The comments in support of the proposed rule completely fail to address the significant underlying technical and economic problems with the proposal. For example, APCO, NENA, and NASNA (the "Joint Commenters") support the rule because "it would greatly enhance the ability of public safety agencies to identify and respond to emergencies reported by wireless telephones." *Comments of Joint Commenters* at 3. Texas, while it acknowledges that "sufficient information may not yet exist to determine definitively the reasonableness of each of the expanded standards and requirements," nevertheless urges the Commission to adopt those standards, presumably to keep actively involved in the issue. *Comments of Texas Advisory Commission* at 1-2. See also *Comments of New Jersey Office of Emergency Telecommunications Services* at 2 (New Jersey supports increased ALI standard but offers no reason why it supports those standards). Similarly, the International Association of Fire Chiefs, Inc. (at 4-5) speculate that the imposition of regulatory requirements that are not currently technically feasible may spawn a technical solution. None of these commenters, however, suggest how to

resolve the technical and economic limitations detailed in the many industry comments. While Omnipoint, and indeed, most commenters would likely agree that more safety through better 911 systems is a good thing, federal regulatory requirements must be grounded in what is feasible.

II. Commenters Do Not Support Mandatory Interoperability Between Inconsistent Wireless Technologies

The Commission's proposal, at ¶¶ 144-153 of the FNPRM, that CMRS operators should be required to complete 911 calls "without regard to the availability . . . of the system or technology utilized by their wireless service"[2] is fundamentally at odds with the Commission's deregulatory decisions in CMRS and was overwhelmingly opposed by commenters.

For years, the Commission has enunciated a policy that encourages the development and use of competing air interface technologies in both the cellular[3] and PCS[4] markets, so long as licensees obey certain mutual interference limits. This policy , which has evolved over time, reflects the experience that consumer demand is better able to promote technologies that meet market needs than a system of regulatory control over technology decisions. In stark contrast to its settled policy, the Commission's proposal in the FNPRM would seemingly force all covered CMRS operators to sacrifice the benefits

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2 FNPRM at ¶147.

3 "Liberalization of Technology and Auxiliary Service Offerings in the Domestic Public Cellular Radio Telecommunications Service," Report and Order, GN Dkt. No. 87-390, FCC 3 Rcd. 7033 (1988), recon. granted in part, Memorandum Opinion and Order, 5 FCC Rcd. 1138 (1990).

4 Second Report and Order, GN Dkt. 90-314, 8 FCC Rcd. 7700, 7755 (1993) (FCC's technical PCS rules are guided by the principle "to provide the maximum flexibility in technical standards so as to allow the new service to develop in the most rapid, economically feasible, diverse manner."); Memorandum Opinion and Order, GN Dkt. No. 90-314, 9 FCC Rcd. 4957, 5021-22 (1994) (FCC rejects reconsideration petitions requesting mandatory interoperability standards, preferring to let market forces lead the industry toward interoperability).

of competing technology standards in order to meet a speculative concern that a non-subscriber dialing 911 may be better served in a particular location by another CMRS operator employing an incompatible technology.

Omnipoint is unaware of any commenters that provided specific support for the Commission's proposal. Instead, commenters overwhelmingly objected to it. As BANM points out, the proposed rule completely ignores the fact that relative signal strength among operators will vary over time and as the caller moves, and that a "strongest signal" rule would unfairly overburden certain networks with 911 calls. *Comments of Bell Atlantic NYNEX Mobile* 5-6. See also *Comments of Southwestern Bell Mobile Systems* at 7. As PCIA explained, the problem of "dead spots" of CMRS coverage will likely end as more competitors enter the market and build-out overlapping systems, obviating the need for the proposed "strongest signal" rule. *Comments of PCIA* at 12. Further, Ericcson observes that "interoperability between wireless systems using distinctly different technologies is extremely difficult to achieve and comes at the expense of more costly and complex portable handsets." *Comments of Ericsson* at 5.

While the Commission relied on the statements of the Ad Hoc Alliance for Public Access to 911 ("Alliance") in proposing a broad interoperability requirement,[5] even Alliance does not support the Commission's proposal. Rather, Alliance explains that it only requests a rule making on the issue of whether *cellular systems* employing *compatible technologies* across a given region should be interoperable so that a 911 call is connected to the cellular system with the strongest signal. *Comments of Alliance* at 5-6.

Some commenters suggest that the Commission adopt an independent radio allocation, or separate service altogether, as a common air interface for E911, in contrast to a broad CMRS interoperability requirement. See *Comments of Alliance* at 6 (Commission should allocate 900 MHz cordless phone spectrum, and "all covered

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5 FNPRM at ¶ 144-45.

carriers [would] be required to handle such calls"); *Comments of Harris Corporation* at 4-9 (Commission should promote an "outboard system" of ALI at 900 MHz and operators could then integrate their systems with the "outboard system"). Omnipoint believes that these alternatives are not sufficiently detailed; at a minimum, they would require (a) re-allocation of 900 MHz spectrum, (b) possible auctioning of spectrum, and (c) build-out and financing of the overlay ALI systems. At this time, such proposals are entirely vague and speculative.

Associated suggests that the Commission should require all wireless carriers to use AMPS as a default common air interface. *Comments of Associated RT, Inc.* at 35-36. Associated asserts that the incompatible technologies employed by CMRS operators can be accommodated through the use of a single AMPS interface and the widespread deployment of "dual-mode and dual-frequency handsets. Id. at 35. Omnipoint respectfully objects. Requiring consumers to purchase dual-mode, dual-band handsets forces them to pay more money for a more bulky handset. Further, operators that add an additional mode and frequency band to increase system capacity, such as through Omnipoint's IS-661 technology, will face even more complex and expensive handset issues if these operators are also required to build in compatibility with 900 MHz AMPS. Consistent with its deregulatory approach, the Commission should allow consumers to purchase more expensive dual-mode/dual-band phones if they so choose, rather than forcing all consumers to purchase more expensive phones.

In sum, the Commission's proposal for interoperability, and commenters' suggestions for common air interfaces or dual-mode phones, are neither technologically nor economically feasible.

III. Commission Must Find A Practical Solution to Routing of Non-Code Identification Calls

Omnipoint respects that many industry and PSAP groups urge the Commission not to require CMRS operators to route non-code identification calls to the appropriate

PSAP, as proposed in the FNPRM at ¶ 149. See, e.g., *Comments of 360 Communications Company* at 5-7; *Comments of Joint Commenters* at 7. Omnipoint finds, however, that blocking non-code identification calls creates several difficulties. It is contrary to reasonable consumer expectations that their 911 call would be blocked by the wireless phone company. While some non-code calls may be fraudulent or hoax calls, it is also possible for legitimate customers to make non-code calls.[6] Moreover, the PSAP-by-PSAP approach to non-code call processing overlooks the complexity of the routing issues for operators that cover several PSAP areas. Routing issues also arise where a single base station or PCS switching office handles callers, in an otherwise efficient manner, that are located in different PSAP service areas. Finally, Omnipoint believes that the public interest is simply disserved with a Commission rule that forces some 911 callers to be dropped; surely, the issue of hoax non-code callers is more appropriately addressed through local criminal prosecutions.

For these reasons, Omnipoint believes that the Commission must permit CMRS operators to route all calls to the appropriate PSAP or, alternatively, the Commission should preempt CMRS operators from civil liability under state tort laws if forced to follow selective call blocking rules. Omnipoint supports the Commission's proposal at ¶ 149 of the FNPRM for carriers to transmit all 911 calls to the PSAP, regardless of whether it contains a code-identification.

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6 For example, if a SIM card on a GSM handset is installed improperly (or perhaps re-installed improperly by the consumer), calls from that legitimate customer will be read as non-code calls.

CONCLUSION

Omnipoint supports the Commission's policy objectives for the continued improvement of wireless E911 services, so long as the Commission's rules reflect current technological and economic constraints on the wireless industry.

Respectfully submitted,

OMNIPOINT COMMUNICATIONS, INC.

By: 

Mark J. Tauber
Mark J. O'Connor

Piper & Marbury L.L.P.
1200 19th Street, N.W.
Seventh Floor
Washington, D.C. 20036
(202) 861-3900

Its Attorneys

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Reply Comments of Omnipoint Communications, Inc. was this 25th day of October, 1996 mailed, postage prepaid, to the following:

Lawrence R. Sidman
Leo R. Fitzsimon
Verner, Liipfert, Bernhard,
McPherson & Hand, Chartered
901 15th Street, N.W.
Suite 700
Washington, D.C. 20005
Attorneys for Nokia Telecommunications, Inc.

Eric Schimmel, Vice President
Telecommunications Industry Association
2500 Wilson Boulevard
Suite 300
Arlington, Virginia 22201
Attorneys for Telecommunications Industry Association

Richard Rubin
Fleischman and Walsh, L.L.P.
1400 Sixteenth Street, N.W.
Washington, D.C. 20036
Attorneys for Associated RT, Inc.

Martin W. Bercovici
Susan M. Hafeli
Keller and Heckman, LLP
1001 G Street, N.W.
Suite 500 West
Washington, D.C. 20001
Attorneys for International Municipal Signal Association
and the International Association of Fire Chiefs, Inc.

Edward W. Hummers, Jr.
Patricia Y. Lee
Holland & Knight
2100 Pennsylvania Avenue, N.W.
Suite 400
Washington, D.C. 20037
Attorneys for Harris Government Communications Systems Division, A Division of Harris Corporation

Samuel A. Simon
901 15th Street, N.W.
Suite 230
Washington, D.C. 20005
Attorney for Ad Hoc Alliance for Public Access to 911

Russell H. Fox
Gardner, Carton & Douglas
1301 K Street, N.W.
Suite 900, East Tower
Washington, D.C. 20005
Attorney for E.F. Johnson Company

David C. Jatlow
Young & Jatlow
Suite 600
2300 N Street, N.W.
Washington, D.C. 20037
Attorney for Ericsson Inc.

Stephen R. Rosen
Theodore M. Weitz
283 King George Road
Room C2A23
Warren, NJ 07059
Attorneys for Lucent Technologies Inc.

Glen A. Glass
Carol Tacker
Janette Boyd Lancaster
17330 Preston Road, Suite 100A
Dallas, Texas 75252
Attorneys for Southwestern Bell Mobile Systems, Inc.

R.C. Ewald
Ratheon E-Systems
7700 Arlington Boulevard
Falls Church, VA 22046-1572

Kevin C. Gallagher
360° Communications Company
8725 West Higgins Road
Chicago, IL 60631

John T. Scott, III
Crowell & Moring LLP
1001 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Attorneys for Bell Atlantic Nynex Mobile, Inc.

Mark J. Golden
Personal Communications Industry Association
500 Montgomery Street
Suite 700
Alexandria, VA 22314-1561

Robert M. Gurss
Wilkes, Arti, Hedrick & Lane, Chtd.
1666 K Street, N.W., Suite 1100
Washington, D.C. 20006
Attorney for APCO

James R. Hobson
Donelan, Cleary, Wood & Maser, P.C.
1100 New York Avenue, N.W.
Suite 750
Washington, D.C. 20005
Attorney for NENA

Joe Blaschka, Jr., P.E.
Adcomm Engineering
14631 128th Avenue, NE
Woodlinville, WA 98072

Richard A. Muscat
Texas Advisory Commission on State
Emergency Communications
Public Agency Representation Section
P.O. Box 12548, Capitol Station
Austin, Texas 78711-2548

S. Robert Miller
State of New Jersey Office of Emergency
Telecommunications Services
NJ Department of Law and Public Safety
P.O. Box 7068
West Trenton, New Jersey 08628-0068

Charles J. Hinkle, Jr.
KSI Inc.
MULOC Inc.
7630 Little River Turnpike
Suite 212
Annandale, Virginia 22003

Mark J. O'Connor